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Before the  
FEDERAL COMMUNICATIONS COMMISSION  
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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of )  
 )  
Advanced Television Systems )  
and Their Impact on the )  
Existing Television Broadcast ) MM Docket No. 87-268  
Service )

COMMENTS OF  
THE NATIONAL CABLE TELEVISION ASSOCIATION, INC.

The National Cable Television Association, Inc. ("NCTA") hereby submits its comments on the Commission's Second Report and Order/Further Notice of Proposed Rulemaking, released May 8, 1992, in the above-captioned proceeding. NCTA is the principal trade association of the cable television industry in the United States, representing the owners and operators of cable systems serving over 90 per cent of the nation's 56.2 million cable households. Its members also include cable programmers, cable equipment manufacturers and others affiliated with the cable television industry.

INTRODUCTION AND SUMMARY

In its Second Report and Order, the Commission has adopted a number of fundamental precepts for the implementation of advanced

Television ("ATV") service by the terrestrial broadcast industry.<sup>1/</sup> In particular, the Commission (1) limits initial eligibility for ATV frequencies to existing broadcasters; (2) notifies broadcasters that when ATV becomes the prevalent medium, they will be required to "convert" to ATV, i.e., surrender one of two broadcast channels and cease broadcasting in NTSC; (3) sets a firm conversion date to ATV and (4) concludes that the Commission will adopt a 100 per cent simulcasting requirement at the earliest appropriate point. The Commission also directs its Advanced Television Advisory Committee to continue its ongoing work on achieving compatibility<sup>2/</sup> between the broadcast ATV standard and alternative video delivery media, particularly cable, and on incorporating extensibility into the ATV

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1/ ATV "refers to any television technology that provides improved audio and video quality or enhances the current television broadcast system." The term is principally used to refer to high definition television ("HDTV"). Second Report and Order, MM Docket No. 87-268, (May 8, 1992) para. 1 n.1 ("Second Report and Order").

2/ In reiterating its support of compatibility, NCTA is particularly encouraged that the Commission has recognized the importance of adopting an HDTV system with the ability to encrypt cable programming.

The Advisory Committee's Working Party on Alternative Media, PS/WP-4, is developing the basic performance objectives for conditional access. As part of this process, proponents should be required to specify how these objectives will be achieved, with particular emphasis on security, transparency, i.e., the ability to scramble and unscramble the signal without causing any significant degradation of the picture, and cost-effectiveness.

standard.<sup>3/</sup>

The Further Notice seeks comment on the Commission's tentative conclusion to establish the ATV conversion date at 15 years out from either the adoption of the standard or a Table of Allotments, whichever occurs later, and proposes to revisit the conversion date in 1998. It also seeks comment on its tentative conclusion to require broadcasters to simulcast 100 per cent of their programming no later than four years after the five-year application/construction period. In addition, the Commission will consider alternative simulcast schedules, including proposals to "phase-in" simulcasting before the four-year mark. Finally, the Commission requests comment on the degree of flexibility to accord broadcasters in defining what constitutes "simulcast" programming.

While the Commission is emphatic that the grant of free ATV spectrum to existing broadcasters is temporary and conditional and that it intends to phase-out entirely one technology and replace it with another,<sup>4/</sup> it sets up a scheme at the outset

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3/ NCTA also considers extensibility, which refers to the ability to adapt to innovation and to uses requiring a higher quality signal and more information transmission, to be an important attribute for cable's implementation of HDTV. See Notice of Proposed Rulemaking, MM Docket No. 87-268 (November 8, 1991), para. 47 (citing definitions adopted by Committee for Open High Resolution Systems).

4/ Second Report and Order, paras. 5, 11, 59, 65; Statement of Commissioner Ervin S. Duggan, April 9, 1992 ("The first principle we establish today is that the spectrum we grant for HDTV is for a conversion process . . . The very labels we attach to the process -- "conversion" channel and

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fundamentally at odds with this goal. Specifically, by withholding application of its simulcast requirement until four years after the introduction of the service, the Commission would promote the development of ATV as a new programming service, rather than a new technology. And this in turn will ultimately impede the transition to ATV and the reclamation of the "conversion" spectrum. As two services develop during the early stages of implementation, it will be very difficult to turn back and mandate complete simulcasting in year four. Moreover, allowing broadcasters to program their ATV channels separately from their NTSC channels will disenfranchise NTSC viewers, as broadcasters invest in novel programming for ATV.

Aside from these policy concerns, there are legal considerations to giving away valuable spectrum on a conditional basis to a limited class, i.e., broadcasters, while allowing them free reign to utilize the spectrum in a manner that bears no relationship to the reason it was granted in the first place. To the extent that the ATV channel is allowed to be used to provide a new programming service rather than to occasion a shift in technology, the legal basis for granting such a channel, at no charge, to existing broadcasters without the competitive, comparative process required under the Ashbacker doctrine becomes

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(Footnote continued)

"reversion" channel -- will serve as a constant reminder that the FCC's grant of spectrum for HDTV is not only additional: it is conditional and transitional.")

extremely questionable.<sup>5/</sup> And if the eligibility restrictions are invalidated in court, the whole process could be thrown back to square one.

Given the significant resources that the cable industry has invested in the development of a broadcast-compatible ATV standard, NCTA has an interest in seeing that the public interest rationale and legal underpinnings of the Commission's ATV process are sustained. Indeed, the cable industry's participation in this process has been premised on the understanding that the ATV simulcast scheme adopted by the Commission in 1990 was designed to facilitate a smooth and expeditious transition from NTSC to HDTV. In so doing, the industry was willing to commit to this process, to make some compromises, and perhaps forgo its own more rapid deployment of HDTV, in order to see the development of a standard that meets the needs of broadcasters and ensures their role as video providers in this new technology.<sup>6/</sup> The

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5/ In Ashbacker Radio Corp. v. FCC, 326 U.S. 327 (1945), the Supreme Court held that all bona fide, mutually exclusive applications are entitled to comparative consideration under Section 309 of the Communications Act. See, e.g., Separate Statement of Commissioner James H. Quello, dissenting in part, Tentative Decision and Further Notice of Inquiry in the Matter of Advanced Television, MM Docket No. 3 F.C.C. Rcd. 6520, 6551, September 1, 1988.

6/ With over 60 per cent of American households receiving their broadcast signals via cable, NCTA is pleased that the Commission has recognized the importance of cable's ability to deliver a high quality ATV broadcast signal.

In committing to the ATV standards-setting process, however, the cable industry has necessarily made some trade-offs. For example, the industry largely suspended its development

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abandonment of simulcasting, even during the early years, will delay the transition upon which the industry's participation was based.

Moreover, the cable industry is concerned that under the new ATV regime, cable systems may be forced to carry both the ATV and the NTSC broadcast channels. We recognize that, to date, the Commission has indicated that it does not intend to undertake any new regulatory initiatives, such as mandatory carriage rules, as part of ATV implementation. However, both the Senate cable legislation passed earlier this year, S.12, and the pending House bill, H.R. 4850, provide that once the Commission adopts new ATV standards for broadcast signals, it must initiate a proceeding to establish any changes in the signal carriage requirements of cable systems necessary to ensure cable carriage of local broadcast signals.<sup>7/</sup>

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(Footnote continued)

of techniques (utilizing fiber optics and other technologies) to greatly improve the quality of NTSC for cable subscribers in order to focus its efforts on the development and transition to the new ATV standard. Moreover, the selection criteria for the ATV standard emphasizes the attributes most suitable for broadcast transmission, which may not be optimal for cable or other delivery media. In this regard, NCTA is pleased that the Advisory Committee has set up a task force to oversee both the field testing of the recommended system over both the broadcast and cable distribution network; however, we are still concerned that this process allow sufficient time for additional field tests in the event the recommended system is not workable.

7/ S.12, 102d Cong., 2d Sess., section 614 (1992); H.R. 4850, 102d Cong., 2d Sess., section 614 (1992).



As NCTA has previously pointed out in this proceeding, the carriage of dual NTSC/ATV channels will pose significant burdens for cable systems in some markets. Cable operators could be faced with having to double the amount of capacity for broadcast retransmissions at the same time that an already large and growing number of national and regional satellite-delivered cable programming networks -- many of which themselves will be converting to an HDTV format-- will be vying for carriage. A scenario could arise where cable systems with limited channel capacity will be required to carry both channels, even as the quality of the NTSC programming is declining as ATV is on the ascendancy. While any such carriage requirements would be subject to challenge, in the absence of a simulcasting requirement, there would certainly be no justification for requiring cable systems to devote free channel capacity to a new government-subsidized programming service.

I. THE RATIONALE FOR GRANTING ADDITIONAL FREE SPECTRUM TO EXISTING BROADCASTERS RESTS ON THE INTERIM, TRANSITIONAL NATURE OF THE SECOND CHANNEL AND NECESSARILY REQUIRES SIMULCASTING.

As the Commission states at the outset of the Second Report and Order, "ATV represents a major advance in television technology, not the start of a new and separate video service."<sup>8/</sup> Indeed, the Commission repeatedly underscores that "the reason we are awarding existing broadcasters a second channel is to permit

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8/ Second Report and Order, para. 5 (emphasis added).

them to move to an improved technology without service interruption."<sup>9/</sup> By giving broadcasters the opportunity to make the transition to ATV, the Commission seeks to ensure that broadcasters are able to keep pace and compete with other video providers on this new technological level.

Thus, the whole framework of the advanced television proceeding is to preserve a role for broadcasters as the video marketplace begins to move to an HDTV environment.<sup>10/</sup> Indeed, it was only because the Commission contemplated a complete transition from NTSC to HDTV that it decided to give existing broadcasters a second channel for simulcasting high definition programming. The Commission could have selected the other approach initially under consideration -- augmentation -- in which the HDTV technology was compatible with NTSC broadcasting. If a compatible technology had been adopted, there would have been no need for simulcasting on two channels. A single signal could be received by both NTSC and HDTV receivers, just as a single signal can now be received by both color and black-and-white sets.

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9/ Id., para. 11.

10/ The concern here is not protecting certain broadcasters but preserving over-the-air broadcasting. The original must carry rules were invalidated, in part, on grounds that they were crafted to protect individual broadcasters rather than broadcasting. Similar problems arise here if the Commission tries to justify its decision to allow only existing broadcasters to engage in ATV initially. Quincy Cable TV, Inc. v. FCC, 768 F.2d 1434 (D.C. Cir. 1985), cert. denied, 476 U.S. 1169 (1986).

But the Commission determined that "simulcast systems offer the potential for significantly greater improvement in the quality of television picture and audio performance than NTSC compatible systems."<sup>11/</sup> The Commission also recognized that a 6 Mhz simulcast system would be more spectrum efficient by freeing up the NTSC frequencies for other uses, once ATV became the established transmission medium. Thus, as it became clear that a technology incompatible with NTSC was optimal, a stand-alone simulcast channel was necessary to make the transition without disrupting service to the NTSC viewing public. In other words, simulcasting would replicate the compatibility offered by an augmentation approach; but it was never envisioned as providing two separate services.<sup>12/</sup>

A. The Failure to Require Simulcasting of the Same Programming From the Outset of ATV Implementation Undermines the Commission's Policy Objectives.

Since the grant of additional spectrum is purely an interim measure to effectuate a change in standards, simulcasting essentially the same programming on both channels is integral to achieving that goal. First, it protects the consumer investment in existing television equipment by ensuring that consumers are

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11/ First Report and Order, MM Docket No. 87-268, 5 F.C.C. Rcd. 5627, 5628 (1990).

12/ When the Commission decided to adopt a simulcast approach in 1990, it defined "simulcast" as it is commonly understood: "a contraction of "simultaneous broadcast" and means the broadcast of one program over two channels to the same area at the same time." Id., 5629, n.1.

not forced to purchase new receivers in order to receive the same over-the-air programming available to ATV viewers. If broadcasters are able to provide differentiated programming for ATV receiver owners, viewers with only NTSC receivers would be deprived of such programming.

Moreover, broadcasters would necessarily divert resources from their NTSC programming to develop ATV programming, providing NTSC viewers with increasingly inferior quality programming throughout the transition period. Broadcaster diversion of revenues for new and different ATV programming, especially to jumpstart slow penetration of high definition sets, would clearly have implications for the station's ability to continue to invest in NTSC programming. By requiring the same programming -- either upconverted NTSC or downconverted HDTV -- on both channels, the Commission will ensure that NTSC viewers will not be relegated to having second class programming.

Third, requiring programming to be broadcast simultaneously on both channels promotes a complete, expeditious transition to the new standard. As the Commission recognized, allowing the channels to operate independently will only foster broadcaster and consumer reliance on the ATV channel as a separately programmed service. Such freedom also would create incentives for broadcasters to delay the ultimate conversion to HDTV, so that they could continue to operate two channels of programming indefinitely. As a practical matter, an expectation will build on the part of broadcasters to operate an NTSC channel as a

second, low-end service, and it will become more difficult to reclaim the second channel.

In light of these real risks, the Commission's proposal to allow broadcasters total discretion in programming the ATV channel during the first four years after construction of ATV facilities (or during a phase-in period) is unacceptable. The Commission theorizes that broadcasters may need the freedom to explore the creative potential of the ATV format in order to drive ATV receiver penetration and consumer acceptance of the new technology. However true this may be, it does not require any deviation of program services. It might mean that some new types of programming, made to test the ATV system, will also be carried on NTSC.

Otherwise, the Commission is really saying that ATV will only succeed if offered as an alternative programming service, not as a technological innovation. But the policy behind converting to ATV, in the first place, is to realize the immediate enhancements that higher resolution, wider aspect ratio and digital sound quality bring to programming normally seen today -- primarily movies and sporting events. Indeed, the benefits of ATV can be dramatically seen on programming that can readily be provided in both formats. If such benefits do not motivate consumers to switch to the new technology, the Commission may want to reevaluate its ATV policy. But to allow the development of two different programming services at the

outset will only defeat the Commission's goals of protecting consumer investment in NTSC and ensuring spectrum efficiency.<sup>13/</sup>

More to the point, if the Commission did not require simulcasting, there would be no policy basis for subsidizing the creation of a new programming service by granting broadcasters a free second channel -- especially if broadcasters are allowed to offer their second-channel ATV programming on a pay basis. The cable television industry has expanded its channel capacity not by government largess but by expanding capacity itself through rebuilds. Certainly there would be no justification for requiring cable systems, who finance their own expanded capacity, to provide free channel capacity for non-simulcast video services.

Broadcasters are only being awarded the free spectrum in order to make the transition to HDTV and to ensure the continuing welfare of the NTSC viewers that they are obligated to serve. If they are allowed to program their second channel without regard to these obligations, they should at least be required to pay for the spectrum, just as cable operators and other nonbroadcast media must pay for distribution facilities.

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13/ Another consideration in maintaining a simulcast approach that requires the same programming on both channels is procedural. The Commission has indicated that the broadcast licenses for the two facilities are to be treated as one -- i.e., the ATV license and NTSC license operate in tandem. If programming on the two stations is different, a petition to deny one station would likely not apply to the second and that could cause significant complications for the FCC licensing process.

If broadcasters are unwilling to make significant investment in the new technology without the promise of ATV as a new and separate revenue opportunity, the FCC need only open up the license eligibility requirement to others willing to take the financial risks.

Finally, the simulcast requirement takes on even greater force in the context of the broadcast industry's recent requests for reconsideration of the application/construction deadlines as being too onerous and rigid.<sup>14/</sup> The broadcasters have requested, inter alia, extension of the application deadline, and in some cases a staggered, large-to-small market implementation schedule, and consideration of marketplace factors such as receiver penetration and consumer acceptance of HDTV in applying construction deadlines.

While NCTA does not oppose approaches that seek to make ATV implementation workable, such delay should not be used as a pretext for eliminating the simulcast requirement. Indeed, the more that such increased flexibility creates uncertainty and an indefinite transition period, the more a full simulcast requirement becomes important to fulfilling the Commission's goals. Otherwise, the spectrum could be tied up indefinitely.

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14/ See e.g. Petition for Partial Reconsideration, Maximum Service Television, Inc. (filed June 22, 1992); Petition for Partial Reconsideration, National Association of Broadcasters (filed June 22, 1992).

B. The Failure to Require the Simulcasting of the Same Programming From the Outset of ATV Implementation Undermines the Legal Underpinnings of the ATV Process.

In the Second Report and Order, the Commission regards its decision to adopt a simulcast obligation four years from the introduction of ATV service as making moot any concerns about the "wisdom and legality of adopting an eligibility restriction" for ATV frequencies.<sup>15/</sup> Even during an initial implementation period, however, awarding free spectrum essentially to develop a new video service still threatens the policy and legal underpinnings of the whole ATV process. As noted above, it undermines the policy objective of expediting a transition from NTSC to HDTV that will not disenfranchise NTSC viewers. Moreover, it guts the rationale for simply giving ATV channels to existing broadcasters rather than allocating such channels on a comparative basis.

If the second channel starts on a course as a new and separate programming service, even if the Commission intends to restrict its usage later down the road, it is questionable whether the Commission's rationale for limiting eligibility for the additional spectrum to existing broadcasters could withstand judicial scrutiny.<sup>16/</sup> New ATV programming could be provided by

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15/ Second Report and Order, para. 6 n.10.

16/ The Commission has drawn a delicate line here. A chief rationale for giving the additional spectrum to incumbent broadcasters is that their experience will hasten the implementation of ATV. But this justification does not hold

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any qualified broadcast licensee -- making it difficult to sustain preferential treatment for incumbent licensees. And if the basis for allowing discretionary use of the ATV channel is that ATV is only likely to succeed if offered initially as a new programming service, rather than as enhanced picture and sound quality, there is no sound reason to limit ATV to existing broadcasters.

Under the Ashbacker doctrine, the Commission is required to give comparative consideration to all bona fide mutually exclusive applicants for broadcast licenses. The Commission does have the authority under Storer Broadcasting, however, to set threshold licensee eligibility standards under Ashbacker, provided the eligibility rules are designed to further the public interest.<sup>17/</sup> The Commission has adopted a worthy public interest rationale for granting the ATV spectrum to existing broadcasters -- to foster an expeditious, non-disruptive transition from NTSC to ATV that does not disenfranchise NTSC viewers. But it undoes the rationale by failing to require simulcasting as an essential component of the transition. The decision to grant a second channel to incumbent broadcasters alone thus winds up to be an arbitrary and capricious threshold criteria, no longer tethered

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up when applied to permittees or others who have done no more than file for a construction permit.

17/ United States v. Storer Broadcasting Co., 351 U.S. 192 (D.C. Cir. 1956).

to the public interest of transitioning to ATV without disenfranchising NTSC viewers. NTSC viewers would be disenfranchised by a bifurcated program strategy. As a result, such line-drawing between incumbent broadcasters and all others is arbitrary, imperiling the Commission's approach under Ashbacker, which ordinarily would insist that the assignment process of ATV channels allow bona fide newcomers the opportunity to compete against existing licensees.

II. SIMULCASTING SHOULD BE DEFINED AS THE BROADCAST OF A PROGRAM CONTAINING THE SAME UNDERLYING MATERIAL OVER TWO CHANNELS AT THE SAME TIME.

In adopting the simulcast requirement, the Commission proposes a flexible definition that would have as its guiding principle ensuring that NTSC viewers have the opportunity to receive the same programming available to ATV viewers during the early phase of ATV implementation. Under this approach, "same program" would be defined as a program which has as its basis "the same underlying material."

This definition would allow for such variances in production techniques as different aspect ratios, camera angles or number of cameras, that will showcase the differences in the two technologies. For example, a live sporting event could be shot with HDTV cameras from certain angles for wide screen display on the ATV channel, while the same event could be shot with NTSC cameras from different angles, using fewer cameras for conventional television. Similarly, feature films can be shown on the ATV channel in 16x9 aspect ratio with full high resolution

picture and digital sound quality; while panned and scanned for NTSC display. The critical point is that the same underlying program material is available to both NTSC and ATV viewers.

In addition to different production techniques, broadcasters could be accorded the flexibility, as the Commission suggests, to exclude or substitute different commercials or promotions on ATV channels. Again, as long as the primary programming material -- e.g., movies, sports, entertainment shows -- is available to all viewers, such flexibility does not interfere with protecting NTSC consumers and the transitional nature of the ATV channel.

Time shifting of programming, however, including pre-releases or multiple plays of ATV productions, crosses the line into the development of a separate programming service.<sup>18/</sup> Even though NTSC viewers would arguably not be disenfranchised if the programming is made available to them at a different time, there is no reason why they should not receive it at the same time as ATV viewers receive it. True simulcasting -- the same programming on two channels at the same time -- is the most efficient and expeditious means to implement ATV and most replicates the compatibility sought by authorizing a two-channel

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18/ Offering pre-released ATV productions on a pay-per-view basis is extremely difficult to reconcile with either the notion that ATV is not a new programming service or that NTSC-only households will not be disenfranchised.

approach.<sup>19/</sup> Moreover, when cable programmers, such as HBO or Disney multiplex programming, it is at a real cost to both programmers and cable systems. Cable programmers must negotiate with operators to obtain space on the system -- it is not a giveaway.

As an alternative to a simulcast requirement, the Commission raises the feasibility of inexpensive down-converters or dual mode receivers as a mechanism for protecting the installed base of NTSC equipment. Down-converter devices would enable NTSC sets to receive and display ATV signals (in NTSC quality); while dual mode receivers would contain the capability to receive and display a signal in either format. Assuming down-converters could be made readily available, they are no substitute for a definitive simulcast requirement. Indeed, requiring NTSC viewers to invest more in a technology that the government has designated as obsolete disservices the public interest in moving expeditiously -- and cost-effectively -- toward full ATV implementation. And dual mode receivers, aside from the potential cost, will only perpetuate a dying technology and delay the ultimate conversion

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19/ In adopting this requirement, the Commission is not requiring any particular type of programming, only that both channels must provide essentially the same programming. This restriction is entirely consistent with the Commission's conditional grant of the spectrum to facilitate a transition from conventional NTSC to a new, incompatible ATV technology.

to ATV.<sup>20/</sup>

Moreover, if down-converter equipment provides a simple means to overcome the incompatibility of the two technologies, the whole point of adopting a two-channel simulcast approach is questionable. Why award a second channel at all if the NTSC viewing public can be protected from the inability to receive ATV broadcast channels by a piece of add-on equipment? Furthermore, unless down-converters were mandated at no charge for all NTSC households, a Commission policy favoring down-converters over program simulcasting may create a class of "have-nots" among over-the-air viewers -- precisely what the Commission has sought to avoid in this proceeding.

#### CONCLUSION

For the foregoing reasons, the Commission should adhere to its original program simulcast approach, that is, the broadcast of the same underlying program over two channels at the same time, throughout the transition from NTSC to ATV. Any attempt to

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20/ It is significant that the Commission noted that a simulcast requirement will provide added impetus to ATV receiver penetration by eliminating the need for dual-mode receivers. Simulcasting will thereby help lower the cost of ATV receivers, which in turn should spur increased consumer purchase of new ATV receivers. Second Report and Order, para. 59.

exploit ATV as a new programming service, rather than an improved technology, will be an enormous spectrum giveaway worth billions of dollars -- all at little perceived benefit to today's television households.

Respectfully submitted,

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